

MM4454.ST25.txt  
SEQUENCE LISTING



<110> Hitomi, Jiro  
Yamamura, Tokujiro  
Kimura, Tatsuji  
Yamaguchi, Ken

<120> Novel Calcium-Binding Proteins

<130> MM4454

<140> 09/910,208

<141> 2001-07-20

<160> 20

<170> PatentIn version 3.3

<210> 1

<211> 429

<212> DNA

<213> calcium binding protein

<220>

<221> exon

<222> (48)..(323)

<223> Amino acid sequence of calcium-binding protein from bovine amniotic fluid

<400> 1

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| ctggcattcc acacttctgt gcagaggggt gaacgtagtt tggtaaa atg act aag   | 56  |
| Met Thr Lys   |     |
| 1   |     |
| ctg gaa gat cac ctg gag gga atc atc aac atc ttc cac cag tac tcc   | 104 |
| Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr Ser   |     |
| 5 10 15   |     |
| gtt cgg gtg ggg cat ttc gac acc ctc aac aag cgt gag ctg aag cag   | 152 |
| Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys Gln   |     |
| 20 25 30 35   |     |
| ctg atc aca aag gaa ctt ccc aaa acc ctc cag aac acc aaa gat caa   | 200 |
| Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln   |     |
| 40 45 50  |     |
| cct acc att gac aaa ata ttc caa gac ctg gat gcc gat aaa gac gga   | 248 |
| Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly   |     |
| 55 60 65  |     |
| gcc gtc agc ttt gag gaa ttc gta gtc ctg gtg tcc agg gtg ctg aaa   | 296 |
| Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu Lys   |     |
| 70 75 80  |     |
| aca gcc cac ata gat atc cac aaa gag taggaagctc tttccagcaa         | 343 |
| Thr Ala His Ile Asp Ile His Lys Glu                               |     |
| 85 90   |     |
| tgtccccaag aagacttacc cttctcctcc ctgaggctgc cttacccgag ggaagagaga | 403 |
| attaataaac gtactttggc aaagtt                                      | 429 |

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<210> 2  
 <211> 50  
 <212> PRT  
 <213> Bos taurus

<400> 2

Thr Lys Leu Glu His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr  
 1 5 10 15

Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys  
 20 25 30

Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp  
 35 40 45

Gln Pro  
 50

<210> 3  
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 <212> PRT  
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<400> 3

Ile Phe Gln Asp Leu Asp Ala Asp  
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<210> 4  
 <211> 12  
 <212> PRT  
 <213> Bos taurus

<400> 4

Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu  
 1 5 10

<210> 5  
 <211> 9  
 <212> PRT  
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<400> 5

Thr Ala His Ile Asp Ile His Lys Glu  
 1 5

<210> 6  
 <211> 31  
 <212> PRT  
 <213> Bos taurus

<400> 6

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Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln Pro Thr Ile Asp Lys  
1 5 10 15

Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly Ala Val Ser Phe  
20 25 30

<210> 7  
<211> 20  
<212> PRT  
<213> Bos taurus

<400> 7

Glu Phe Val Val Leu Val Ser Arg Val Leu Lys Arg Ala His Ile Asp  
1 5 10 15

Ile His Lys Glu  
20

<210> 8  
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<212> DNA  
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<220>  
<223> sense primer

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> n is a, c, g or t

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<222> (15)..(15)  
<223> n is a, c, g, or t

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ttngargayc ayytngargg

20

<210> 9  
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20

## MM4454.ST25.txt

|       |            |
|-------|------------|
| <210> | 10         |
| <211> | 23         |
| <212> | DNA        |
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23

|       |            |
|-------|------------|
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| <211> | 24         |
| <212> | DNA        |
| <213> | Artificial |

<220>  
<223> reverse primer

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24

|       |                               |
|-------|-------------------------------|
| <210> | 12                            |
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| <212> | DNA                           |
| <213> | human calcium-binding protein |

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<221> exon
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<223> Deduced amino acid sequence for human calcium-binding protein
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1 5 10

att gtc aat atc ttc cac caa tac tca gtt cgg aag ggg cat ttt gac 99  
Ile Val Asn Ile Phe His Gln Tyr Ser Val Arg Lys Gly His Phe Asp  
15 20 25

acc ctc tct aag ggt gag ctg aag cag ctg ctt aca aag gag ctt gca 147  
Thr Leu Ser Lys Gly Glu Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala  
30 35 40

aac acc atc aag aat atc aaa gat aaa gct gtc att gat gaa ata ttc 195  
 Asn Thr Ile Lys Asn Ile Lys Asp Lys Ala Val Ile Asp Glu Ile Phe  
 45 50 55

caa ggc ctg gat gct aat caa gat gaa cag gtc gac ttt caa gaa ttc 243  
Gln Gly Leu Asp Ala Asn Gln Asp Glu Gln Val Asp Phe Gln Glu Phe  
60 65 70

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ata | tcc | ctg | gta | gcc | att | gcg | ctg | aag | gct | gcc | cat | tac | cac | acc | cac | 291 |
| Ile | Ser | Leu | Val | Ala | Ile | Ala | Leu | Lys | Ala | Ala | His | Tyr | His | Thr | His |     |
| 75  |     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |     |

aaa gag taggtagctc tctgaagctt tttacccagc aatgtcctca atgaggggtct 347

## Lys Glu

tttctttccc tcaccaaacc ccagccttgc ccgtggggag taagagttaa taaacacact 407

cacgaaaagt taaaaaaaaa aaaaaaaaaat tct 440

<210> 13

<211> 20

<212> DNA

<213> Artificial

<220>

<223> sense primer

<400> 13

actatcaaca tcttccacca 20

<210> 14

<211> 20

<212> DNA

<213> artificial

<220>

<223> antisense primer

<400> 14

tctttatcgg catccaggtc 20

<210> 15

<211> 15

<212> DNA

<213> Artificial

<220>

<223> primer PMN.HP7S 1-15

<400> 15

tactcagttc ggaag 15

<210> 16

<211> 15

<212> DNA

<213> Artificial

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<223> primer PMN.HP7A 126-112

<400> 16

ttggaatatt tcac 15

<210> 17

<211> 20

<212> DNA

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<223> primer HP7S 7-26

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<400> 17  
acattaggct gggaagatga 20

<210> 18  
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<400> 18  
ggacattgct gggtaaaaag 20

<210> 19  
<211> 92  
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<222> (1)..(92)  
<223> Amino acid sequence of SEQ ID No. 1

<400> 19  
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Glu Tyr Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu  
20 25 30  
Leu Lys Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr  
35 40 45  
Lys Asp Gln Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp  
50 55 60  
Lys Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg  
65 70 75 80  
Val Leu Lys Thr Ala His Ile Asp Ile His Lys Glu  
85 90

<210> 20  
<211> 92  
<212> PRT  
<213> human calcium binding protein

<220>  
<221> MISC\_FEATURE  
<222> (1)..(92)

&lt;223&gt; Amino acid sequence of SEQ ID No. 12

&lt;400&gt; 20

Met Thr Lys Leu Glu Glu His Leu Glu Gly Ile Val Asn Ile Phe His  
1 5 10 15

Gln Tyr Ser Val Arg Lys Gly His Phe Asp Thr Leu Ser Lys Gly Glu  
20 25 30

Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala Asn Thr Ile Lys Asn Ile  
35 40 45

Lys Asp Lys Ala Val Ile Asp Glu Ile Phe Gln Gly Leu Asp Ala Asn  
50 55 60

Asn Asp Glu Gln Val Asp Phe Gln Glu Phe Ile Ser Leu Val Ala Ile  
65 70 75 80

Ala Leu Lys Ala Ala His Tyr His Thr His Lys Glu  
85 90